

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P554895

Luminaire Tested: **FUSL-12-2-LD4-2LO-30-UNV-81-97-EDD**

Issue Date: 7/16/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P554895  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/16/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FUSL-12-2-LD4-2LO-30-UNV-81-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

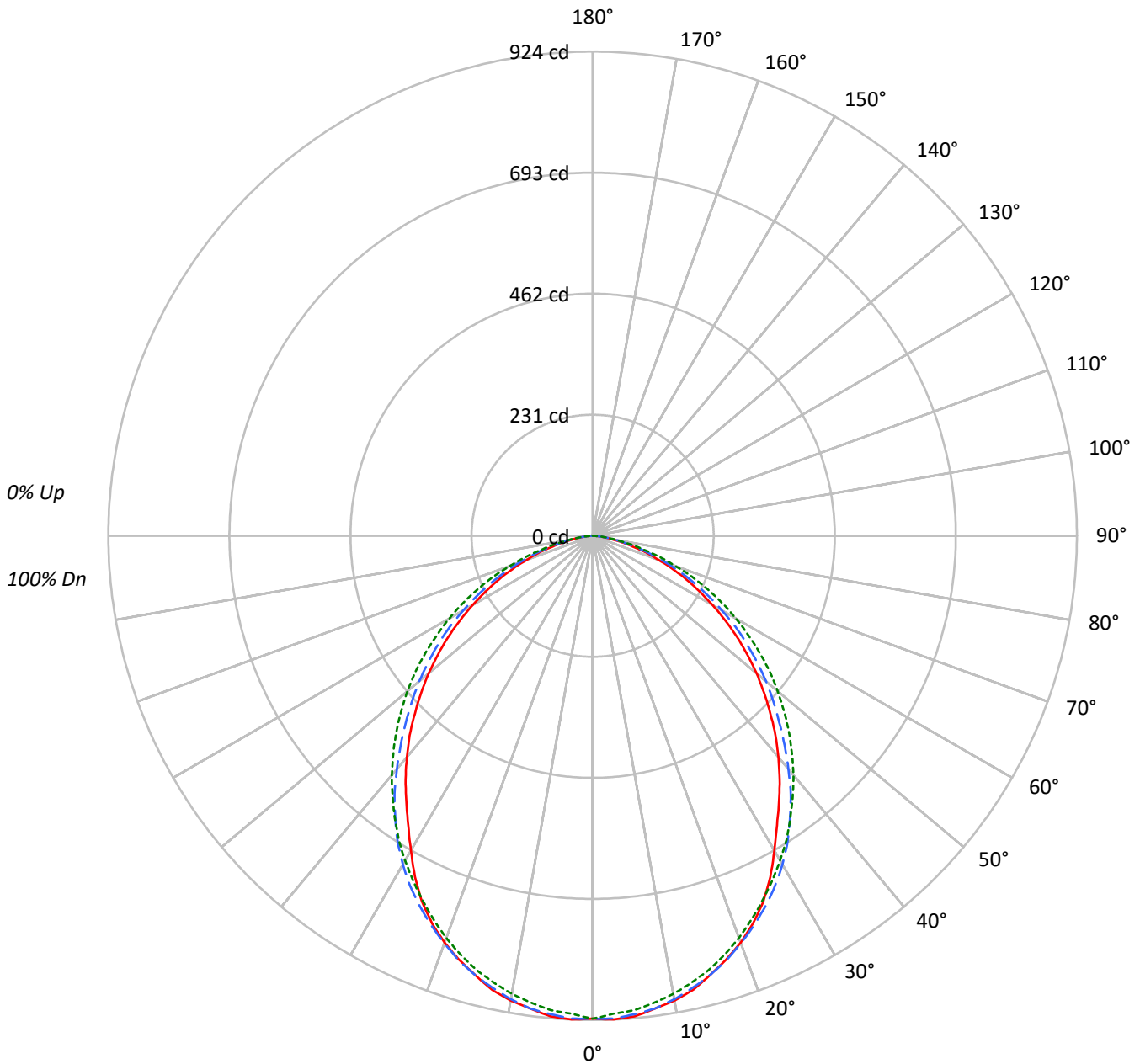
Lumens per Lamp: N/A  
Luminaire Lumens: 2131.0 lumens  
Efficiency: N/A  
Efficacy: 91.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 23.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47																			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37																			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34																			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4960	4960	4960
5°	4973	4952	4910
10°	4921	4907	4851
15°	4833	4833	4778
20°	4731	4737	4676
25°	4575	4632	4558
30°	4308	4502	4447
35°	4071	4315	4322
40°	3873	4082	4189
45°	3651	3835	4032
50°	3418	3614	3860
55°	3153	3362	3651
60°	2840	3068	3396
65°	2507	2728	3088
70°	2090	2323	2625
75°	1643	1855	2054
80°	1175	1305	1447
85°	766	766	722



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.8	4.1
10°-20°	243.8	11.4
20°-30°	356.2	16.7
30°-40°	404.4	19.0
40°-50°	390.3	18.3
50°-60°	322.0	15.1
60°-70°	214.4	10.1
70°-80°	96.0	4.5
80°-90°	17.2	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	686.8	32.2
0°-40°	1091.1	51.2
0°-60°	1803.5	84.6
0°-90°	2131.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2131.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	922	922	922	922	922	
5°	920	920	917	912	909	87
15°	867	870	867	864	858	245
25°	770	776	780	774	768	353
35°	620	628	657	660	658	388
45°	480	488	504	527	530	370
55°	336	342	358	378	389	300
65°	197	202	214	229	242	195
75°	79	83	89	94	99	86
85°	12	12	12	12	12	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	921.6	921.6	921.6	921.6	921.6
2.5°	924.1	924.4	922.3	916.6	913.1
5°	920.5	920.2	916.6	911.7	908.9
7.5°	910.3	911.0	909.9	902.8	898.9
10°	900.4	900.7	897.9	892.2	887.6
12.5°	887.6	887.3	883.4	880.5	873.1
15°	867.4	869.6	867.4	863.5	857.5
17.5°	848.0	848.0	849.4	842.6	838.0
20°	826.0	827.1	827.1	821.8	816.4
22.5°	800.5	803.7	804.8	799.1	792.7
25°	770.4	776.4	780.0	774.3	767.6
27.5°	734.0	743.2	753.8	749.5	742.1
30°	693.2	706.7	724.4	720.9	715.5
32.5°	654.6	668.1	692.5	691.1	688.3
35°	619.6	628.1	656.8	660.3	657.8
37.5°	586.3	594.1	621.0	629.2	627.0
40°	551.3	559.8	581.0	595.5	596.2
42.5°	516.6	524.7	542.1	562.9	562.9
45°	479.7	487.9	503.8	526.8	529.7
47.5°	443.6	452.1	467.7	490.7	495.3
50°	408.2	416.0	431.6	453.9	461.0
52.5°	371.4	379.9	395.1	415.7	425.9
55°	336.0	341.7	358.3	378.1	389.1
57.5°	299.2	304.5	323.3	340.2	351.6
60°	263.8	270.5	285.0	302.4	315.5
62.5°	229.8	236.9	249.3	264.5	279.3
65°	196.9	202.2	214.2	229.4	242.5
67.5°	165.0	169.6	181.6	192.3	206.1
70°	132.8	138.8	147.6	157.9	166.8
72.5°	106.9	109.4	116.8	124.3	133.5
75°	79.0	83.2	89.2	93.5	98.8
77.5°	56.6	59.1	62.7	66.2	71.2
80°	37.9	38.9	42.1	42.8	46.7
82.5°	23.0	23.7	24.4	24.8	26.2
85°	12.4	12.4	12.4	11.7	11.7
87.5°	7.1	7.1	6.0	5.0	3.5
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)